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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/297,289	04/28/1999	MASATOSHI MOTEKI	551512/058	9554

7590

03/01/2004

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NEW YORK, NY 100384982

EXAMINER

GOODWIN, JEANNE M

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/297,289

Applicant(s)

MOTEKI ET AL.

Examiner

Jeanne-Marguerite Goodwin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-40 and 54-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-40, 54-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/8/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 14-40 and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,668,382 to Plesko [hereinafter Plesko] in view of JP Abstract 57108237 to Tadashi [hereinafter Tadashi].

Plesko discloses a motor assembly comprising a spiral spring (200) in the shape of a flat Plate which lies in a plane having initial flexure, the spring (200) may be of a beryllium-copper alloy and is mounted on a rotor shaft (188), an outer perimeter of the spring (200) is secured to a housing (170) in that cutouts (212) which are formed in and spaced about the outer circumference of the spring (200). Plesko discloses all the subject matter claimed by applicant with the exception of the limitation stated in claims 14, 23 and 34, i.e., the spring being formed of an amorphous metal material; the limitation stated in claims 16-19, 25-28, and 36-39, i.e., the size and shape of the spring; the limitation stated in claims 21, 22, 30, 31, i.e., the amorphous metal being formed of a plurality of laminated metal strips.

With respect to the limitation stated in claims 14, 23 and 34: Tadashi teaches using a amorphous spring material for a watch in order to reduce the formation of rust and the occurrence of breakage. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the spring material, as taught by Plesko, with the spring material, as taught by Tadashi, in order to reduce the formation of rust and the occurrence of breakage, as already suggested by Tadashi.

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With respect to the limitation stated in claims 16-19, 25-28, and 36-39: the size and shape of the spring, absent any criticality, is only considered to be an obvious modification of the size and shape of the spring disclosed by Plesko as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 (CCPA 1976).

With respect to the limitation stated in claims 21, 22, 30, 31: the amorphous metal being formed of a plurality of laminated metal strips, this limitation, absent any criticality, is only considered a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results will be obtained if the amorphous spring assembly is used to reduce the formation of rust and the occurrence of breakage, as already illustrated by Plesko and Tadashi, 2) the amorphous spring assembly, as claimed by applicant and the amorphous spring assembly used by Plesko and Tadashi are well known alternate types of amorphous spring assemblies which will perform the same function, if one is replaced with the other, of reducing the formation of rust and the occurrence of breakage, and the 3) the use of the amorphous spring assembly is considered to be nothing more than the use of one of numerous and well known alternate types of amorphous spring assemblies used to reduce the formation of rust and the occurrence of breakage that a person having ordinary skill in the art would have been able to provide using routine experimentation.

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Response to Arguments

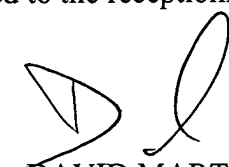
3. Applicant's arguments with respect to claims 14-40 and 54-57 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's environment; US Patent 4,595,184 to Bohm et al. discloses a spiral spring; US Patent 3,647,025 to Paya Rico and US Patent 6,609,822 to Tokoro et al. disclose a spiral spring lying in a plane disclosure. The prior art cited in the PTO-892 disclose related devices. US Patent 4,635,755 to Arechaga, US Patent 2,833,543 and US Patent 2,833,027 to Foster disclose a spring for use in a spring motor; US Patent 4,155,397 to Honsinger et al., US Patent 4,380,572 to Liebermann et al., US Patent 4,211,944 to Haller, US Patent 4,763,030 to Clark et al., US PG-PUB 2002/0153807 to Schwartz et al. and US Patent 4,116,728 to Becker et al. disclose the use of amorphous material in a spring

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (703) 305-0264. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JMG
Feb. 9, 2004


DAVID MARTIN
SUPERVISORY PATENT EXAMINER
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